



PATENT APPLICATION

1742  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yukiko OZAKI et al.

Application No.: 09/817,171

Filed: March 27, 2001

Docket No.: 108789

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TC 1700  
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For: LUBRICANTS FOR DIE LUBRICATION AND MANUFACTURING  
METHOD FOR HIGH DENSITY IRON-BASED POWDER COMPACTS

SUPPLEMENTAL PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office  
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Page 15, lines 16-23, delete current paragraph and insert therefor:

B1  
As an iron-based powder, a partially alloyed steel powder having a composition of Fe-4Ni-0.5Mo-1.5Cu was used. This partially alloyed steel powder was mixed with a graphite powder and lubricants for powder molding by a heat mixing method using a high-speed mixer so as to produce an iron-based mixed powder. The additive amount of the graphite was 0.5% by weight relative to the entire iron-based mixed powder. The kinds and the additive amounts relative to the entire iron-based mixed powder of the lubricants for compacting powder were as shown in Tables 1-1 to 1-3 below.

Page 25, lines 1-6, delete current paragraph and insert therefor:

B2  
Regarding each of the compacts according to the invention, the ejection forces after molding was as low as about 20 MPa or less, and the density was as high as about 7.30